

UNIVERSITY OF CALIFORNIA.

AGRICULTURAL EXPERIMENT STATION.

BULLETIN NO. 29.

Distribution of Plants and Scions.

The following kinds of plants and scions, of proven or probable economic value in this State, will be available for distribution from the University during the present season. Plants will not, as a rule, be ready for sending out until on or about February 1st; while scions may, if desired, be sent as pruning progresses. Applications should be made at once, and will be filled in the order in which they have been received, omitting, however, such plants as are known to be unadapted to the climate of the locality concerned. Since, moreover, the object of the distribution is to test the adaptation of the plants in as many localities as possible, numerous applications from one and the same locality cannot be filled unless a surplus remains after those from different sections have been supplied.

Plants will be forwarded by express, scions by mail (unless specially otherwise requested), in lots consisting of the number hereinafter mentioned for each kind, on remittance of 25 cents for each lot of plants, and 10 cents additional for each additional lot, to pay expenses of packing, etc. For scions, send 10 cents for postage on each dozen called for. Postal notes, payable at the Berkeley postoffice, are requested to be sent in lieu of stamps whenever practicable. Any surplus left after filling orders as far as possible will be returned to the senders, deducting letter postage.

Plants.

Esparto grass, *Stipa tenacissima*, the grass so extensively used in the Medi erranean countries for cordage, baskets, etc., and lately exported in large quantities as a material for paper making. It grows naturally on sandy beaches, within reach of salt water, but will doubtless be found adapted to many saline and alkaline lands now unreclaimed or occupied by the common tule. It should be thoroughly tested in sandy lands southward of the Bay, especially on the west side of the San Joaquin valley, and in South California. When once "set," it will send roots deep for moisture. 10 plants to each lot.

The Carob tree, *Ceratonia Siliqua*, the true "Algaroba" or St. John's bread of the Mediterranean region, has been heretofore recommended for cultivation in the southern part of the State,

on dry and otherwise unavailable hillsides, as well as in richer and moister lands, for the production of an excellent milk-producing feed (See report Coll. of Agr. for 1882, p. 66). Hardy from the bay southward, perhaps also as far north as St. Helena and Marysville. Five plants to each, it being necessary to make sure of having both staminate and pistillate trees together.

European or English oak, *Quercus robur*. Last season several thousands of acorns of this useful timber tree were distributed throughout the State. About 2,000 seedlings of the same are now ready for distribution. Unlike the American oaks, when transplanted to the climate of California this tree proves to be a rapid grower, unexpectedly resistant of drouth, and promises well as the hardwood timber tree of the future on the Pacific Coast. It is not choice as to soil and location, and would probably do well both on the mountains and in the plains, where the latter are not too dry. Its success should be extensively tested. Six plants to each.

The New Zealand Flax, so useful to gardeners and vineyardists for the purpose of tying with the ribbons into which the leaves readily split, and which are exceedingly strong, is again offered for distribution. Six plants to each.

The Ramie, the so-called Chinese grass, of which the preparation for textile purposes by machinery seems now to be in the way of accomplishment, should be more extensively tested. It succeeds exceedingly well at Berkeley in heavy adobe, and is known to do well on sandy soils. Six plants to each.

Angola Panic—(*Panicum Spectabile*, *Sorghum Halepense* or as it has unfortunately been called in California, "evergreen millet"). Roots in one-pound packages.

New Zealand Salt Bush, *Atriplex nummularia*, a forage plant adapted to salty and alkali soils (see Rep. for 1882, p. 117), belonging to the Lamb's quarter group of plants; is much liked by cows. Ten plants to each lot.

Of the Sicilian sumac, *Rhus Coriaria*, the expected large supply has not been realized, on account of the failure of the imported seed to germinate. It is now being multiplied by cuttings and suckers from large plants. A small number can be distributed, one plant and one good root to each lot.

Cuttings and Scions.

Cuttings of the Huasco grape, from Chile, producing the splendid raisins exported from that country. This grape has almost ripened its fruit this season at Berkeley, and the latter closely resembles the muscat in most respects. Three cuttings to each lot.

In respect to scions, it should be understood that apart from cherries, to which the soil of the University Grounds is hostile, all the more prominent varieties of apples, pears, plums, peaches, apricots, etc., are represented in the University orchard, to serve as standards for verification of varieties. It is not deemed proper, as a rule, to offer for distribution varieties that can be readily obtained from nurseries, and thus to compete with private enterprises. Hence those mentioned here are only such of the less common sorts as in our experience at this locality seem to deserve a wider trial.

Pears. These were here, as elsewhere in the State, this season strongly affected by blight. The following remained almost exempt from this disease: Duchesse Precoce*, Doyenne Robin, Jalousie de Fonteney, Paradis d'Automne, Marie Louise d'Uccles, Sheldon*, Duchesse d'Orleans, Swan's Orange, Beurre Bosc*, Conseiller de la Cour*, Louis Vilmorin, Pitmaston Duchess*, Doyenne D'Alencon*. Of these, those starred* are specially recommended as worthy of trial.

The following were more or less affected:

Brandywine, Beurre Sterckman, Gratiola of Jersey,* De Tongres,* Fulton, Baronne de Melow,* Jones' Seedling, Gray Doyenne, St. Germain.*

Many other good varieties, such as Andre Desportes, St. Michael, Archangel, Napoleon III, Rutter, Figue d'Alencon, etc., were so badly affected, that it seems undesirable to distribute scions from them until the prevention of the blight disease shall have been better studied.

Plums. Of these, the following are recommended for trial: Black Morocco, Ontario, Wangenheim Prune, Prince of Wales.

Apricots. Blenheim, Alberge De Montagamet, Purple, Katsha, Canino Grosso, De Coulorge, Beuge, are among the less known varieties worthy of trial in this State, and of which scions can be sent.

Of the seeds previously announced for distribution the following are exhausted: the two kinds of *Bromus*, *Melium multiflorum* and *Pyrethrum Cinerariæfolium*.

Address applications to

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